

Notice of Allowability

Application No.

10/023,267

Examiner

Marianne L. Padgett

Applicant(s)

DAVID ET AL.

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/23/04 & 8/31/04.
2. ☒ The allowed claim(s) is/are 1,3-5 and 7-16.
3. ☒ The drawings filed on 14 December 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 4/23/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20041129.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Art Unit: 1762

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment to claims was requested/granted in a telephone interview/messages with Sean J. Edman on 11/27/04 & 11/29/04.

In the claims:

Cancel claims 17-22, non-elected with traverse.

In the specification:

On page 11, line 12, change "App. 09/519449" to --No. 6,696,157, issued 2/24/2004--.

The following is an examiner's statement of reasons for allowance: applicants' comments in the 8/31/04 response, on the importance of the mean free path (MFP) limitation in the process now in lines 7-8 of the independent claim is agreed with, & along with the clarifications of the process that remove the 112, 2nd rejections is considered to put the claims in condition for allowance.

It is noted that applicants' discussion of diamond-like glass (DLG) on p.6-7 of the 8/13/04 response with reference to SN 09/519,449 = PN. 6,696,157, is sufficient to define the term and remove the 112 1st & 2nd rejections. Addition of the MFP & "hydrophilicity...increased" limitations to claim 1 removes the obviousness double patenting rejection.

Some further art of interest to the MFP of plasma species includes; Wang et al (5,871,811; col.2, lines 30-62+), who teach that active depositing species typically have an MFP long compared to step dimensions on the substrate, but while step dimensions may be small topography somewhat comparable to porosity, it isn't pores, nor is there any indication that Wang et al's substrates are within the plasma's ion sheath, hence the configurations/plasmas are further not necessarily analogous; Narayanan

Art Unit: 1762

(5,486,357; col.2, lines 61-67+) teach a MFP of gaseous plasma media that approximates the interior diameter of tubing being treated/coated, hence while the tube interior may be considered analogous to pores, then relationship between MFP & diameter differs from that claimed; Bray et al (6,468,642 B1) teach a coating related to applicants' DLG coating & use of MFP in its deposition, but using a particle beam not plasma & no mention of porosity in the substrate: and Kuhman et al (6,243,112 B1) is of interest for teaching use of MFP in adjusting plasma parameters, but for a remote plasma, a hydrophobic coating & no mentioned pores.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne L. Padgett whose telephone number is (571) 272-1425. The examiner can normally be reached on M-F from about 8:30 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck, can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MLP 11/27/04



**MARIANNE PADGETT
PRIMARY EXAMINER**